

ABSTRACT

The present application provides a biodegradable polyurethane elastomer comprising soft segments A and B, and hard segment C, wherein: the
5 segment A is formed from poly(β -hydroxybutyrate) diol and optional one or more components selected from the group consisting of poly(lactic acid)diol, polyglycolide diol, polylactide diol, polycaprolactone(PCL) diol and poly(lactic/glycolic acid) diol; the segment B is formed from polyethylene glycol; the segment C is formed from one or more
10 diisocyanate selected from the group consisting of 1,6-hexamethylene diisocyanate, isophorone diisocyanate and lysine diisocyanate; and the molar ratio of these segments are: $(A+B)/C = 0.8$ to 1.2 ; $A/B = 0.1$ to 10 ; and the amount of the poly- β -hydroxybutyrate units in the segment A is 10-100 mol%.

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